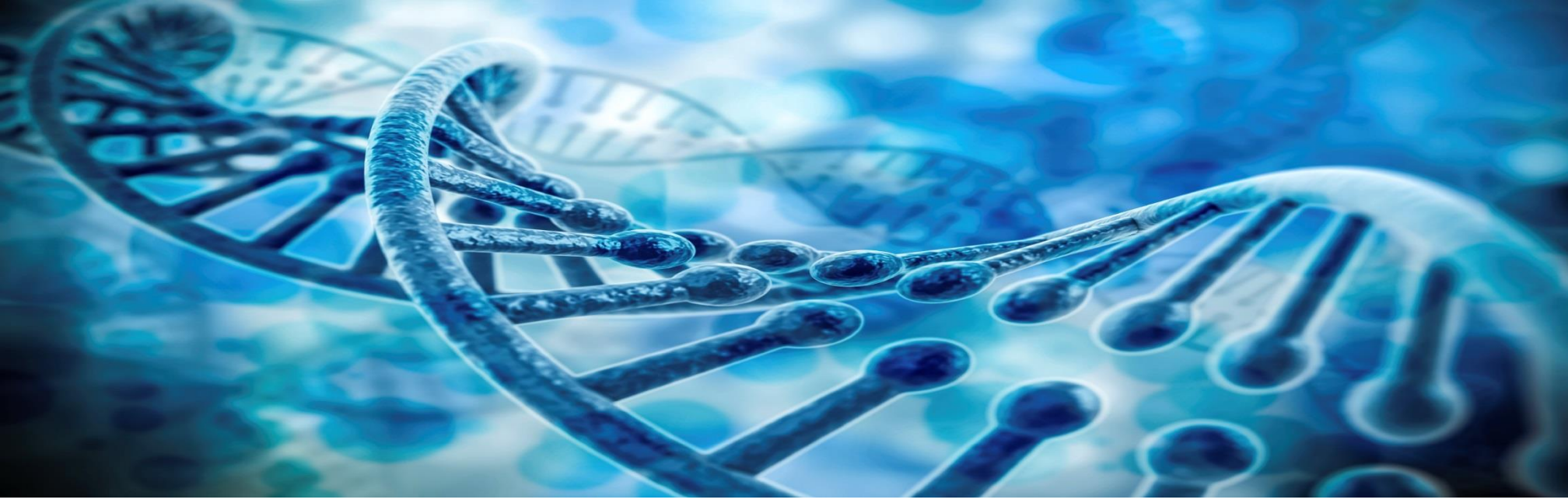


REGENERX

2021 Annual Stockholders Meeting

Forward-Looking Statements

This presentation contains certain forward-looking statements that involve risks and uncertainties that could cause actual results to be materially different from historical results or from any future results expressed or implied by such forward-looking statements. Examples of such forward-looking statements include statements concerning the target dates for completing the company's or its partners' ongoing clinical trials for ophthalmic and orphan indications, the potential size of addressable markets, including the market for eye drops and parenteral delivery products, the company's ability to enter into any collaborations with respect to the development or commercialization of its product candidates, and the therapeutic potential of Tβ4 for ophthalmic, cardiovascular and neurovascular disorders. Factors that may cause actual results to differ materially from any future results expressed or implied by any forward-looking statements include the risk that although Tβ4 has demonstrated potential therapeutic benefit for dermal, ophthalmic, cardiovascular and neurovascular disorders, the company's product candidates may not demonstrate safety and/or efficacy in clinical trials, the risk that encouraging results from early research, preclinical studies, compassionate use or clinical trials may not be confirmed upon further analysis of the detailed results, the risk that additional information relating to the safety, efficacy or tolerability of our product candidates may be required by regulatory agencies, the risk that the company or its licensees will not obtain approval to market the company's product candidates in the U.S. or abroad, the risks associated with reliance on outside financing to meet capital requirements, the risks associated with reliance on licensees for the funding or conduct of further development and commercialization activities relating to the company's product candidates, the risks that the company's patents will not be enforceable or expire prior to commercial marketing, and such other risks described in the company's latest Annual Report on Form 10-K, and other filings the company makes with the SEC. Any forward-looking statements are made pursuant to Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, and, as such, speak only as of the date made. The Company undertakes no obligation to publicly update any forward-looking statements, whether as a result of new information, future events or otherwise.

Overview

RegeneRx (RGRX) is a clinical-stage, biopharmaceutical company engaged in the design, research and development of novel peptides targeted at diseases with unmet medical needs. The Company conducts its research and clinical trials through an outsource/partnership business model.

Market Data

Ticker (OTCQB)	RGRX
Price (11/2/2021)	$0.17
52 Week Range	$0.15 - $0.82
Market Cap	$24.5 mil
Projected Cash Runway	Through 2022
Average Daily Trading (3 mos)	108,000 shrs
Common Shares Outstanding	143.5 mil
Insider/Affiliate Ownership	46%

Company Highlights

- Thymosin beta 4 (Tβ4) is a novel therapeutic peptide for tissue and organ protection, repair, and regeneration.
  - 3 unique formulations for the treatment of ophthalmic, cardiac, CNS, PNS, and dermal disorders
  - Supported by over 900 peer-reviewed scientific and medical publications and multiple clinical trials
- RGN-259 is a preservative-free eye drop formulation of Tβ4 in late-stage clinical development for dry eye syndrome and neurotrophic keratitis (NK)
  - 3 ophthalmic Phase 3 clinical trials with 1,600+ patients completed
  - $4.4 billion global annual dry eye market; $500 million global annual NK market
- Tβ4 reclassified as a biologic as of March 20, 2020
  - Requires BLA rather than NDA for marketing approval in U.S.
  - Major benefit is 12 years of U.S. market exclusivity after approval
- Low-cost outsource/partnership business model
  - 3 active global strategic partnerships via out-licensing and JV agreements
  - RGRX to receive royalties, regulatory and commercial milestone payments + equity in U.S. JV, no financial obligations
  - Over 20 MTA's developing potential uses of Tβ4 with little or no cost
  - Low burn rate, high flexibility

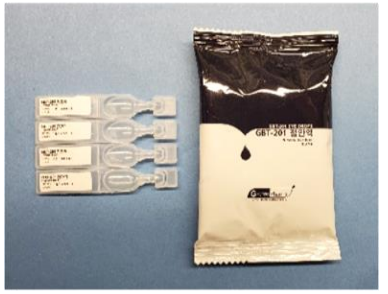
Outsource/Partnership Business Model

- ✓ Demonstrate proof-of-concept with R&D and early clinical trials
- ✓ Partner with companies with clinical development and/or commercialization strengths
  - Strategy enables multiple paths to commercialization
  - Mitigates risks and facilitates efficiency
- ✓ Obtain royalties and commercial milestone payments from licensees
- ✓ Retain significant equity position and royalties through U.S. joint venture (ReGenTree LLC)
- ✓ Leverage R&D through Material Transfer Agreements (MTAs) at major research institutions around the world
- ✓ Minimize fixed costs and funding obligations to provide strong operating leverage
- – Monetize successful JV ophthalmic asset prior to or upon FDA approval

International Partners Aligned with RegeneRx

- 3 active strategic partnerships and a U.S. joint venture developing RegeneRx drug candidates
  - ReGenTree Joint Venture
    - Exclusive U.S. and Canadian ophthalmic license to RGN-259 from RegeneRx
    - GtreeBNT, as majority partner in JV, is funding all clinical development
    - RGRX retains equity and future royalties and has veto power on material transactions
  - GtreeBNT License
    - Licensed RGN-259 for ophthalmology in Pan Asia territory (excluding countries licensed by Lee's)
    - Licensed RGN-137 in the U.S., Canada, EU, S. Korea, Japan and Australia
    - Gtree is undergoing acquisition by HLB Pharma Group
  - Lee's Pharmaceuticals License (to Zhaoke Ophthalmology a spin-off of Lee's)
    - Licensed Tβ4 product candidates for China, HK, Taiwan and Macau
    - Initially developing RGN-259 for dry eye syndrome through Zhaoke
    - Recently completed state-of-the-art manufacturing facility for ocular products and intends to accelerate RGN-259 development
    - Expect to file IND in China in 2022 and conduct Phase 3 dry eye trial in 2023
- RegeneRx retains rights to RGN-259 ophthalmic eye drops in EU and worldwide rights to RGN-352 injectable outside of licensed Greater China territory

U.S. Dry Eye Clinical Trials with RGN-259



- RGRX and its partners are developing RGN-259 (Thymosin beta 4) for the treatment of ocular disorders such as dry eye syndrome and neurotrophic keratopathy
- Based on its numerous mechanisms of action, Tβ4 is an excellent candidate to treat dry eye syndrome (DES), which is a multifactorial disorder that results in damage to the surface of the eye, resulting in dryness, burning, pain, grittiness and reduction of visual acuity.
  - ARISE-1, 2015-2016
    - 317 patient, Phase 2B/3, 4 sites in U.S.
    - Demonstrated statistically significant improvements in both signs and symptoms of dry eye in a dose dependent manner
  - ARISE-2, 2016-2017
    - 601 patient, Phase 3, 10 sites in U.S.
    - Demonstrated statistically significant improvements in ocular discomfort and OSDI at Day 15
  - ARISE-3, 2018-2020
    - 700 patients, 20 sites in U.S.
    - Demonstrated statistically significant improvements in ocular discomfort at Day 15
  - Total of 1,618 treated at 20 sites in all 3 trials

Summary of Dry Eye Efficacy Results

Summary of ARISE-1, -2, -3 and Pooled Data

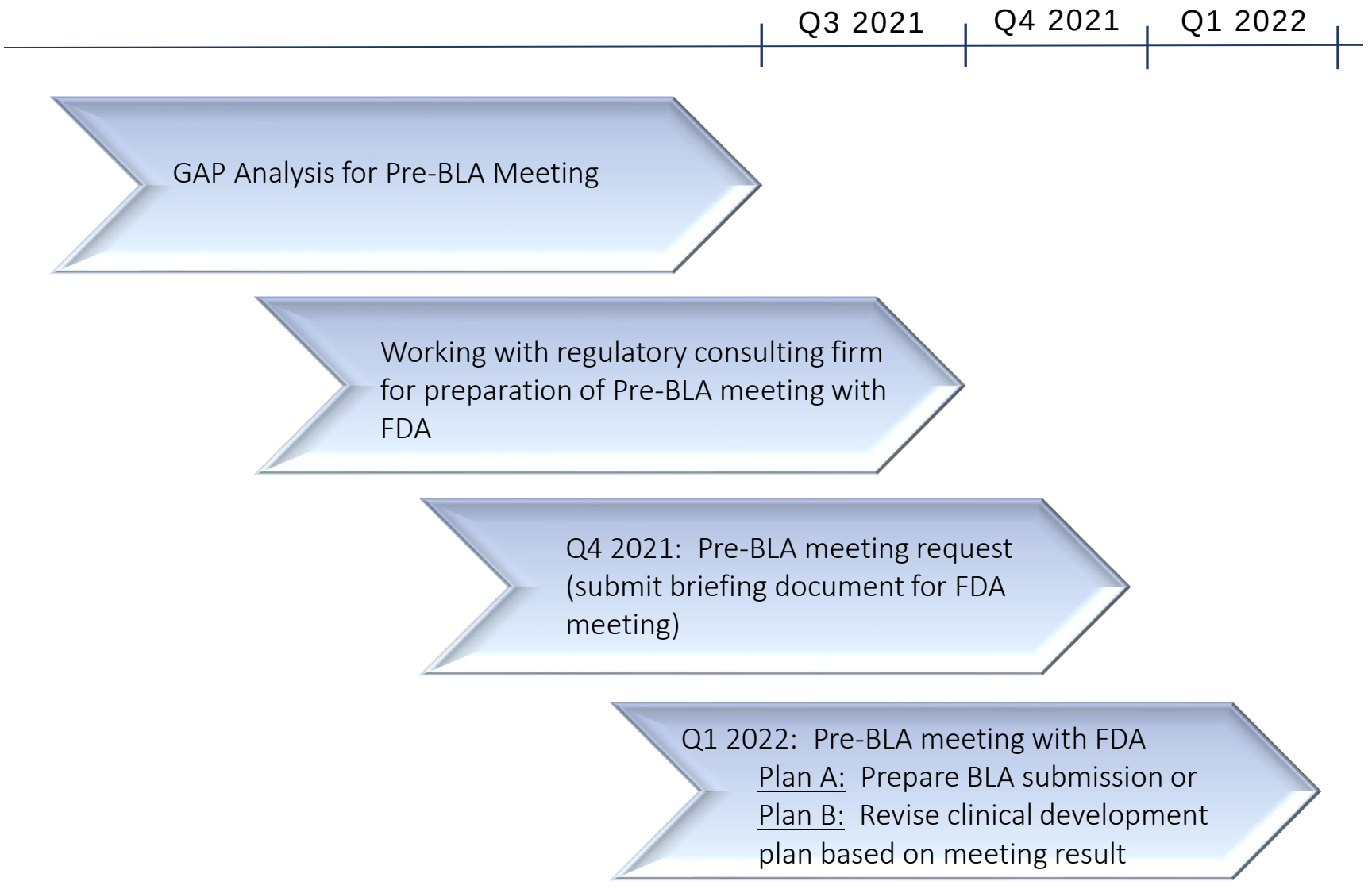
- Ocular discomfort in ARISE-2 and Grittiness in ARISE-3, symptom parameters specified in FDA guidelines, showed statistically significance improvements with RGN-259.
- Statistically significant sign improvements were observed in central corneal region, the most important area for visual acuity.
  - Improvement of damage in all regions of the cornea was observed as a global effect.
- Statistically significant improvements in Grittiness were seen in the ITT population of ARISE-3 and the Pooled Data of the same population as ARISE-3 (>1,000 patients).
- Efficacy effects with RGN-259 were confirmed in a variety of symptom variables that are difficult to confirm in other dry eye products, i.e., ocular discomfort, grittiness, OSDI, and others.
- The significant symptom improvements with RGN-259 were observed after 1 week and 2 weeks of treatment.
- Excellent safety profile was consistent throughout the three trials.

Regulatory History of Dry Eye Drugs

Previous FDA Approvals Based on Pooled Data, Subgroup Analysis, & Data Totality for Dry Eye Syndrome

- Restasis: multiple sub-group analyses and pooled data analysis were considered by FDA as evidence of efficacy; multiple submission with revised packages.
- Cyclosporine 0.1%: EU approval given on post-hoc analysis using pooled data as there was no difference in primary endpoint.
- FDA approved Xiidra by considering totality of data across several clinical trials even when the majority of trials failed to show primary endpoint differences.
- Pooled data from ARISE-1, ARISE-2, and ARISE-3 show the fast onset of RGN-259 efficacy in both signs and symptoms of dry eye syndrome and provide a strong foundation for consideration of the totality of the data by FDA.

Revised Regulatory Target Timeline – U.S. Dry Eye Syndrome



Neurotrophic Keratopathy (NK)

NK is a rare degenerative corneal disease caused by impairment of the trigeminal nerve or its branches mostly due to herpes simplex virus and surgery and can lead to blindness.

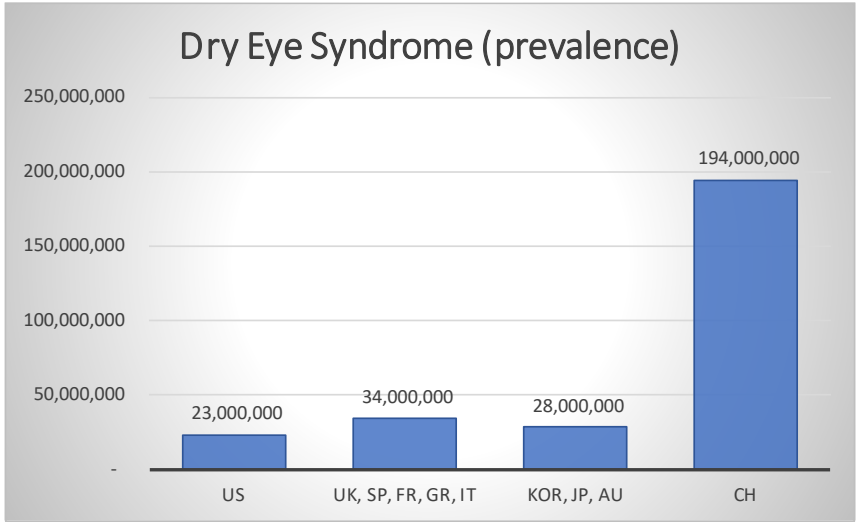
- Neurotrophic Keratopathy (NK)
  - Chronic degenerative disease characterized by decreased corneal sensitivity, limited or no corneal healing, significant pain
  - Approximately 175,000 cases of NK in the U.S.[1]
    - ~12,000 stage 2 & 3, the target population
  - Estimated $500 million annual market worldwide
  - Oxervate (Dompé Farmaceutici SpA/Italy) is the first FDA-approved treatment for NK. Patients typically used 28 vials per month for two months. List price is $48,498 in the U.S.[2]
- Orphan drug designation
  - Accelerated clinical development timeline
  - 7 years of market exclusivity in the U.S., 10 years in the E.U.
  - Certain tax credits upon marketing approval
- Phase 3 trial data completed in March 2020
  - Shortened trial (due to slow patient recruitment) demonstrated efficacy and durability
  - Presentation at AAO meeting in New Orleans on November 12-15, 2021

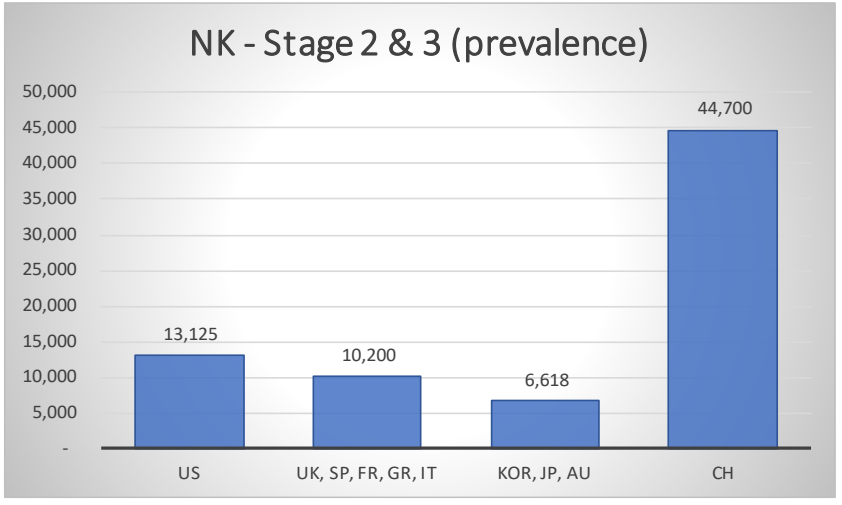
(1) Clinical Ophthalmology, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3964170/
(2) 10 priciest drugs in America, BenefitsPro, https://www.benefitspro.com/2020/08/24/10-priciest-drugs-in-america/?slreturn=20210427140932

Seer-1 Results in NK

- Multi-Center, Randomized, Double-Masked, Placebo-Controlled Study
- 18 patients enrolled
  - 0.1% RGN-259 (10 in RGN-259 group) vs. (8 in placebo group)
- Treatment 5x daily for 28 days + 14 days post treatment follow-up
- Primary Endpoint: Percentage of patients achieving complete healing of the defect at 4 weeks
- Efficacy highlights:
  - 6 of 10 patients in the RGN-259 group, 1 of 8 patients in placebo group achieved corneal healing in 4 wks.
  - Due to limited number of patients, the statistical significance was p = 0.0656 (Fisher's exact test), but when analyzed using the Chi square test, the statistical significance was p = 0.0400.
  - Pre-specified secondary endpoints: Corneal epithelial healing at day 43 (2 wks post treatment) showed statistical difference using the Fisher's exact test, p = 0.0359 demonstrating durability of treatment with RGN-259
  - Several other efficacy parameters were either highly significant or strongly trending toward statistical significance in the RGN-259 group indicating the depth of patient response to RGN-259.
  - RGN-259 was well-tolerated and there were no safety issues.
- ReGenTree will await outcome of dry eye BLA strategy prior to initiating SEER-2.

Worldwide Target Markets for RGN-259 in DES and NK





The information on these charts is estimated and/or derived from market data reports, scientific and medical publications, and other sources of information thought to be reliable. RGRX has extrapolated certain prevalence numbers based on reported demographic populations in specific territories. RGRX does not warrant the accuracy of the information and undertakes no obligation to publicly update any information contained herein, whether as a result of new information, future events or otherwise.

U.S. Dry Eye Market Competition

- Restasis®
  - >$1.1 billion annual Restasis® sales[1]
  - Patients experience burning & stinging and efficacy typically not seen for 6 months
  - Package insert states Restasis® is only 15% effective vs. 5% for placebo
- Xiidra™ recently launched in U.S.
  - Estimated $400 million in sales in 2018[2]
  - Patients report irritation, reduced visual acuity, and dysgeusia (foul taste in mouth)
  - Purchased by Novartis from Takeda for $5.3 B, $3.2 B cash; $2.1 B in milestones
  - Novartis recently withdrew EMA app because EMA said benefits did not outweigh risks
- Eysuvis® recently approved in U.S.
  - Ocular corticosteroid, can only be used for 2 weeks to avoid side effects
  - No sales data yet available
- RGN-259 clinical effects are within days, with no burning, stinging or dysgeusia
- RGN-259 demonstrated higher efficacy than Restasis® when compared side by side in animal model of dry eye

RGN-259 Compares Favorably to Approved Drugs for Dry Eye

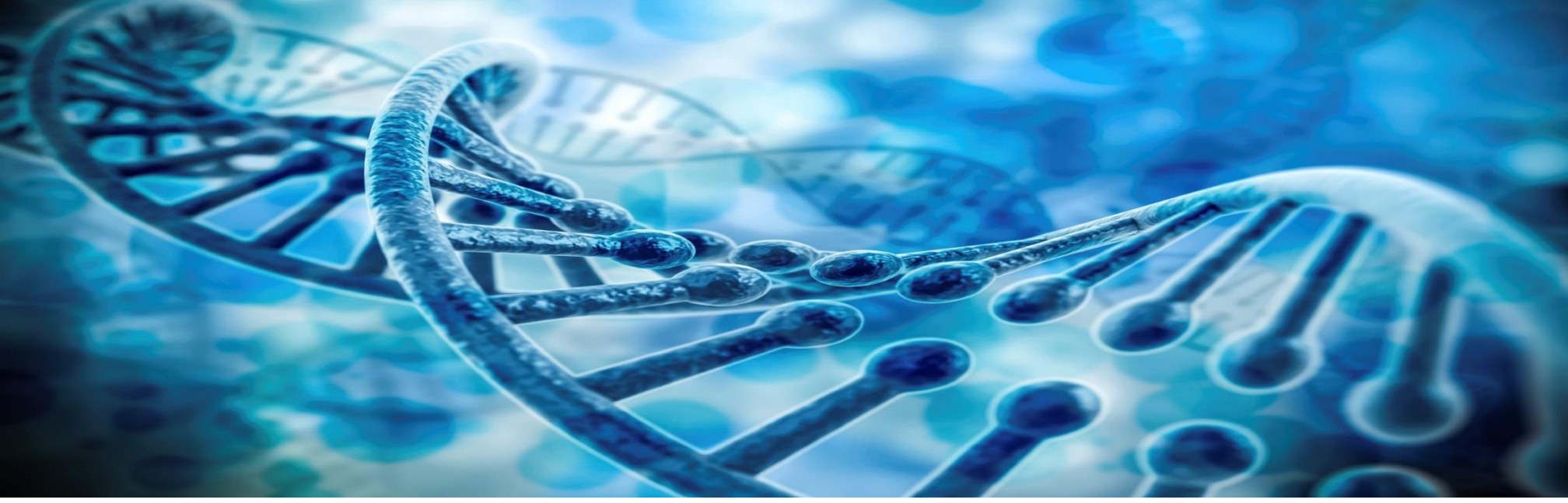
(1) Source: 2019 10(K)
(2) Fierce Pharma, June 6, 2020 https://www.fiercepharma.com/special-report/10-novartis-takeda-s-xiidra

RGN-352 Injectable Solution

- RGN-352 injectable solution
  - Phase 1 completed; well-tolerated with no serious adverse events
  - Large body of published scientific data demonstrating *in vivo* effects in animals:
    - Cardiac tissue protection and repair including a recent study indicating prevention of aortic aneurisms in animal models published in the *J. Clinical Investigation (2021);*
    - Neurologic tissue protection and repair, peripheral neuropathy;
    - Prevention of end organ failure resulting from sepsis;
    - Due to its array of mechanisms of action affecting tissue protection and repair, Tβ4 was identified by researchers at Oak Ridge Laboratories/U.S. as one of the top drug candidates for the treatment of Covid-19, *eLife* (2020).
- After regulatory submission for RGN-259 and upon additional capitalization, RGRX intends to further clinical developmental of RGN-352

RegeneRx and Partners' IP Portfolio

- 7 granted patents for DES and/or NK
  - Compositions, methods of treating, methods of manufacturing and uses
  - Expiries from June 2026 to July 2037
- 2 granted patents for other ophthalmic indications
  - Methods of use
  - Expiries from March 2030 to March 2032
- 2 pending patents relating to mechanisms of action of Tβ4
  - Estimated expiries from November 2038 to December 2039
- 9 granted patents in various countries worldwide related to systemic administration of Tβ4 (RGN-352)
  - Methods of use and compositions
  - Expiries from 2025 to 2032
- 3 provisional patent applications for new uses of Tβ4 in PCT countries
  - Methods of use and compositions
  - Expiries estimated around 2038-2040



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